

### REMARKS/ARGUMENTS

Claims 11-18 are pending. By this Amendment, the specification and claims 11-17 are amended, and new claim 18 is presented. Support for the amendments to the specification and claims 11-17 can be found, for example, in the instant specification and in original claims 11-17. Support for new claim 18 can be found, for example, in the instant specification at page 5, lines 31 to 33 and page 9, lines 29 to 32. No new matter is added. In view of the foregoing amendments and following remarks, reconsideration and allowance are respectfully requested.

#### Personal Interview

Applicants appreciate the courtesies extended to Applicants' representative during the October 10, 2006 Personal Interview. Applicants' separate record of the substance of the interview is incorporated in the following remarks.

#### Drawings

The Office Action Summary fails to indicate whether the drawing filed on February 3, 2004 is acceptable. The Examiner is respectfully requested to indicate that the drawing is acceptable in the next paper issued in this application.

#### Information Disclosure Statement

The Examiner has not yet acknowledged consideration of several references identified on the Form PTO-1449 submitted with the February 3, 2004 Information Disclosure Statement. The Office Action indicates that legible copies of foreign patent documents were not provided with the Information Disclosure Statement. Applicants submit that copies of the cited references were provided to the Patent Office in the parent of this application (U.S.

Patent Application No. 10/334,000), and thus need not be submitted in this case. *See* 37 C.F.R. §1.98(d)(1). The Examiner is requested to acknowledge consideration of each reference cited on the Form PTO-1449, by initialing the form and returning the initialed form to the undersigned.

Objection to the Specification

The Office Action objects to the specification as including various informalities. By this Amendment, the specification is amended to obviate the objection. Accordingly, reconsideration and withdrawal of the objection are respectfully requested.

Rejection Under 35 U.S.C. §112, Second Paragraph

The Office Action rejects claims 16 and 17 as indefinite under 35 U.S.C. §112, second paragraph. Applicants respectfully traverse the rejection.

By this Amendment, claims 16 and 17 are amended to correct the antecedent basis informalities identified in the Office Action. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

Rejection Under 35 U.S.C. §102

The Office Action rejects claims 11-17 under 35 U.S.C. §102(b) over U.S. Patent No. 5,931,579 to Gallus et al. ("Gallus"). Applicants respectfully traverse the rejection.

Claim 11 is directed to a reactor including a plurality of reactor sections. That is, the reactor of claim 11 includes a plurality of separate areas where a desired reaction (e.g., reaction of carboxylic acid with liquid isobutene in the presence of an acid catalyst) is carried out. In embodiments, the reactor sections can have different volumes or be maintained at

different temperatures. Gallus does not disclose or suggest a reactor including a plurality of reactor sections.

The Office Action appears to assert that Gallus discloses a mixer-reactor including a mixing chamber 2 and a distribution chamber 3 that correspond to the plurality of reactor sections recited in claim 1. However, the mixer-reactor of Gallus does not include a plurality of reactor sections – the mixer-reactor section of Gallus includes only one reactor section. Each of the plurality of reactor sections in claim 1 is configured hold a reaction mixture, i.e., a combination of separate reactants introduced to the reactor. In Gallus, by contrast, only the mixing chamber 2 holds a combination of separate reactants (first material flow 4 and second material flow 6) introduced to the disclosed mixer reactor. The distribution chamber 3 of Gallus is not a reactor section, but rather a means by which a reactant (second material flow 6) is fed to the mixing chamber 2. *See* column 3, lines 29 to 35. It is only after the first material flow 4 is fed from the bent duct 5 into the mixing chamber 2, and the second material flow 6 is fed from the distribution chamber 3 into the mixing chamber 2, that a reaction mixture is formed. *See id.* The mixer reactor of Gallus includes only one reactor section, not a plurality of sections.

As Gallus fails to disclose or suggest a reactor including a plurality of reactor sections, Gallus fails to disclose or suggest each and every feature of claim 11.

As explained, claim 11 is not anticipated by Gallus. Claims 12-17 depend from claim 11 and, thus, also are not anticipated by Gallus. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

Application No. 10/769,911  
Reply to Office Action of August 22, 2006

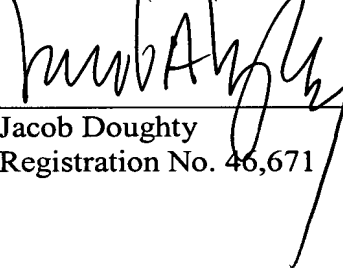
Conclusion

For the foregoing reasons, Applicants submit that claims 11-18 are in condition for allowance. Prompt reconsideration and allowance are respectfully requested.

Respectfully submitted,

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